

B.T. COPY

14 JUL 1932

Index. No. **33780**
(For London Office only.)

Rpt. C.11.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

Shelby deck with tonnage opening and forecastle on shelby deck.

(Type of Superstructures.)

Port of Survey

New York

Date of Survey

July 5th 1932

Name of Surveyor

W. H. Runkham

Ship's Name

M. S. "Silverwalnut"

Nationality and Port of Registry

London British

Official Number

161455

Gross Tonnage

6699 per 1930-7

Date of Build

1930-7

Moulded Dimensions: Length

455

Breadth

61.75

Depth

30'-6 1/2"

Moulded displacement at moulded draught = 85 per cent. of moulded depth

14949

tons

Coefficient of fineness for use with Tables

414

Particulars of Classification

*+100 41**with freeboard.*

Depth for Freeboard (D)

Moulded depth *30.54*Stringer plate *.04*Sheathing on exposed deck (*None*) $T \left(\frac{L-S}{L} \right) =$

Depth for Freeboard (D) =

30.58

Depth correction

(a) Where D is greater than Table depth
(D-Table depth) R = $(30.58 - 30.33) \times 3 = (+).75$ (b) Where D is less than Table depth (if allowed)
(Table depth-D) R =

If restricted by superstructures

Round of Beam correction

Moulded Breadth (B) *61.75'*Standard Round of Beam = $\frac{B \times 12}{50} = 14.82$ Ship's Round of Beam = *15 1/2"*Difference *excess .68*

Restricted to

Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.68}{4} \times .0054 = \text{NIL}$

DEDUCTION FOR SUPERSTRUCTURES.

Standard Height of Superstructure *7'-6"*

" " R.Q.D.

Deduction for complete superstructure *42.0*Percentage covered $\frac{S}{L} = 100 -$ " " $\frac{S_1}{L} = 99.46$ " " $\frac{E}{L} = 99.46$ Percentage from Table, Line A.
(corrected for absence of forecastle (if required)) *99.33*Percentage from Table, Line B.
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = $.9933 \times 42 = 41.72$

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<i>41.42</i>	<i>41.42</i>	<i>11'</i>	<i>-</i>	<i>41.42</i>
" overhang ...	<i>.33</i>	<i>.14</i>			<i>.14</i>
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...			<i>9'-6"</i>	<i>-</i>	
" overhang aft ...	<i>408.25</i>	<i>408.25</i>	<i>to</i>		<i>408.25</i>
" overhang forward ...	<i>.33</i>	<i>.25</i>			<i>.25</i>
F'cle enclosed ...			<i>12'-6"</i>	<i>-</i>	
" overhang ...					
Trunk aft ...					
" forward ...	<i>4.64</i>				
Tonnage opening aft ...	<i>5.35</i>	<i>2.46</i>	<i>11"</i>	<i>-</i>	<i>2.46</i>
" " forward ...					
Total ...	<i>455.00</i>	<i>452.55</i>			<i>452.55</i>

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<i>55.50</i>	1		<i>55.50</i>	<i>38.75</i>	<i>80.75</i>	1		<i>80.75</i>
1/8 L from A.P. ...	<i>24.40</i>	4		<i>98.80</i>	<i>16.6</i>	<i>35.93</i>	4		<i>143.72</i>
3/8 L " ...	<i>6.10</i>	2		<i>12.20</i>	<i>4.15</i>	<i>8.88</i>	2		<i>17.76</i>
Amidships ...	-	4		-	-	-	4		-
5/8 L from F.P. ...	<i>12.20</i>	2		<i>24.40</i>	<i>8.9</i>	<i>14.46</i>	2		<i>28.92</i>
3/4 L " ...	<i>49.40</i>	4		<i>197.60</i>	<i>35.8</i>	<i>58.52</i>	4		<i>234.08</i>
F.P. ...	<i>111.00</i>	1		<i>111.00</i>	<i>71.5</i>	<i>131.50</i>	1		<i>131.50</i>
Total ...				<i>499.50</i>					<i>636.73</i>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{138.23}{18} (.75 - .50) = (+) 1.91$

If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = *30.58*Summer freeboard = *4.02*Moulded draught (d) = *26.56*

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = *6.64*

Addition for Winter North Atlantic Freeboard (if required =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 15540$

Tons per inch immersion at summer load water line

 $T = 56.5$ Deduction = $\frac{\Delta}{40 T}$ inches $= 6.88$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.414 + .68}{1.36} = \frac{1.392}{1.36}$ Depth Correction *.75*Deduction for superstructures *41.72*Sheer correction *1.91*

Round of Beam correction

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

Summer Freeboard = *48.18*SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, *Steel, Deck*Tropical Fresh Water Line above Centre of Disc ... *13 1/4"*Fresh Water Line " " ... *1"*Tropical Line " " ... *6 3/4"*Winter Line below " " ... *6 1/4"*Tropical Fresh Water Freeboard ... *2'-10 1/2"*Fresh Water " " ... *3'-5 1/2"*

Tropical " " ...

Winter " " ...

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
On Shelter Deck										
Description of Hatchway	No. 1.	No. 2.	No. 3.	No. 4.	No. 1.	No. 2.	No. 3.	No. 4.		
Dimensions of Hatchway	31'6" x 21'	32' x 21'	29'4" x 21'	31'6" x 17'	31'6" x 21'	32' x 21'	40' x 8'	32' x 21'	4' x 8' x 21'	
COAMINGS	Height above Deck	36	Same as	None	9" B.A.	9" B.A.	24"	12"	Tonnage Opening on	
	Thickness Sides	.50			.44	.44	.50	.50		
	Thickness Ends	.50			.44	.44	.50	.50		
	Stiffeners	3/4 x 3/4 x 44	No. 1.	None	None	None	None	None		
HATCH BEAMS	Brackets, Stays	3	3	2	None	None	None	None	Shelter Deck Aft is fitted with 2 1/2" wood temporary covers fitted F. & Aft.	
	Number	5	5	5	1	5	5	5		
	Spacing	5'25"	5'33"	4'9"	4'75"	5'25"	5'33"	5'33"		
	Scantling and Sketch	4 1/2 x 3 x 42 15 1/2 x 32	Same as	Same as	4 x 3 1/2 x 44 24 x 44	4 x 3 1/2 x 44 24 x 44	4 x 3 1/2 x 44 24 x 44	3 x 3 x 44 13 x 44		
FORE AND AFTERS	Bearing Surface	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	None	
	Number	None	None	None	None	None	None	None		
	Spacing	None	None	None	None	None	None	None		
	Unsupported Lengths	None	None	None	None	None	None	None		
HATCH COVERS	Scantling* and Sketch	None	None	None	None	None	None	None		
	Bearing Surface	None	None	None	None	None	None	None		
	Material	wood	Same as	Same as	wood	wood	Steel	Insulated Plug		
	Thickness	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	50"	50"		
Spacing of Cleats	How fitted	F. & A.	Same as	Same as	F. & A.	F. & A.	Hinged cross stiffeners	Hatched	None	
	Bearing Surface	3	3	3	3	3	10"th	10"th		
	Number of Tarpaulins	24	24	24	24	24	24	24		
		3	3	3	3	3	3	3		

*Are wood fore and afters steel shod at all bearing surfaces? ☒
 Are battens and wedges efficient and in good condition? ☒
 Are tarpaulins in good condition and in accordance with rule requirements? ☒ Yes. Strong and waterproofed.
 Are lashings provided in accordance with rule requirements? ☒ Yes. 3 on Nos. 1 & 2 - 3 - 4 - 5
 2 on No. 6

Particulars of fiddle, funnel and ventilator coamings:—

No fiddle. The funnel is riveted to steel B.A. deck plating. One opening in funnel on after side 55" x 19", sill 18" door of steel with handle both sides. The E.R. skylight coaming is 12" @ sides, 48" @ centre. 1/2" thick, and closed with strong steel hinged flaps secured from below. Five E.R. vents each 24" diam. 8 ft coaming above B.A. deck. 1/2" thick. No stays. Provided with wood covers and canvas.

Particulars of Flush Bunker Scuttles:—

None

Particulars of Companionways:—

None

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—

The holds are ventilated by 36", 30" and 24" dia. vents. Coamings are generally 60" x 1 1/2" and bracketed to deck. Vents to crew's accommodation spaces and peaks. Three at 12" dia, four at 9" dia, and ten at 6" dia. all generally 50" coamings by 5 1/2". Wood covers and canvas provided for all these vents.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—

Air pipes to double bottom and peak tanks are 3" and 4" dia. coaming 27" high. ~~wood~~ wood plugs ~~not~~ provided.

Particulars of Gangway Cargo and Coaling Ports:—

None

Particulars of Scuppers and Sanitary Discharge Pipes — The shelter deck is scuppered by means of 7" x 4" oval holes (8 ft. 8 ft.) thro gunwale bars. Seven scuppers (each side) are led from shelter timber deck space and discharge about 24" below 2nd deck (upper). Bronze storm valves are fitted on all of these pipes. There is no crew accommodation below the line of the shelter deck. Storm (bronze) valves are fitted on all discharges from spaces above the shelter deck.

Particulars of Side Scuttles:—

No portlights are fitted except in upper fore-castle space, and these are all provided with 68" deadlights.

Particulars of Guard Rails:—

Plate bulwarks fitted amidships (see sketch) 42" high, with 6" B.A. rail and stays about 6 ft. apart. Open rails forward and aft are 42" high and have three rods. Upper fore-castle has open rails 46" high with three rods.

Particulars of Gangways, Lifelines, etc.:—

Hand rails are fitted on sides of houses on shelter deck. Lifelines are arranged when required.

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
Forward Well	5' - 4"	11 ft.	25" x 12"	1 P. 1 S.	2.08	✓
Forward Well	✓	✓	✓	✓	✓	✓

State position of each freeing port (F. and A. position and height above deck edge) ☒ Forward Well:— In well aft. 15' above deck.
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Hinged flap, with one strongback.
 Additional area where sheer is less than standard. ☒

Particulars of Superstructures, Trunks, Casings, Deckhouses.

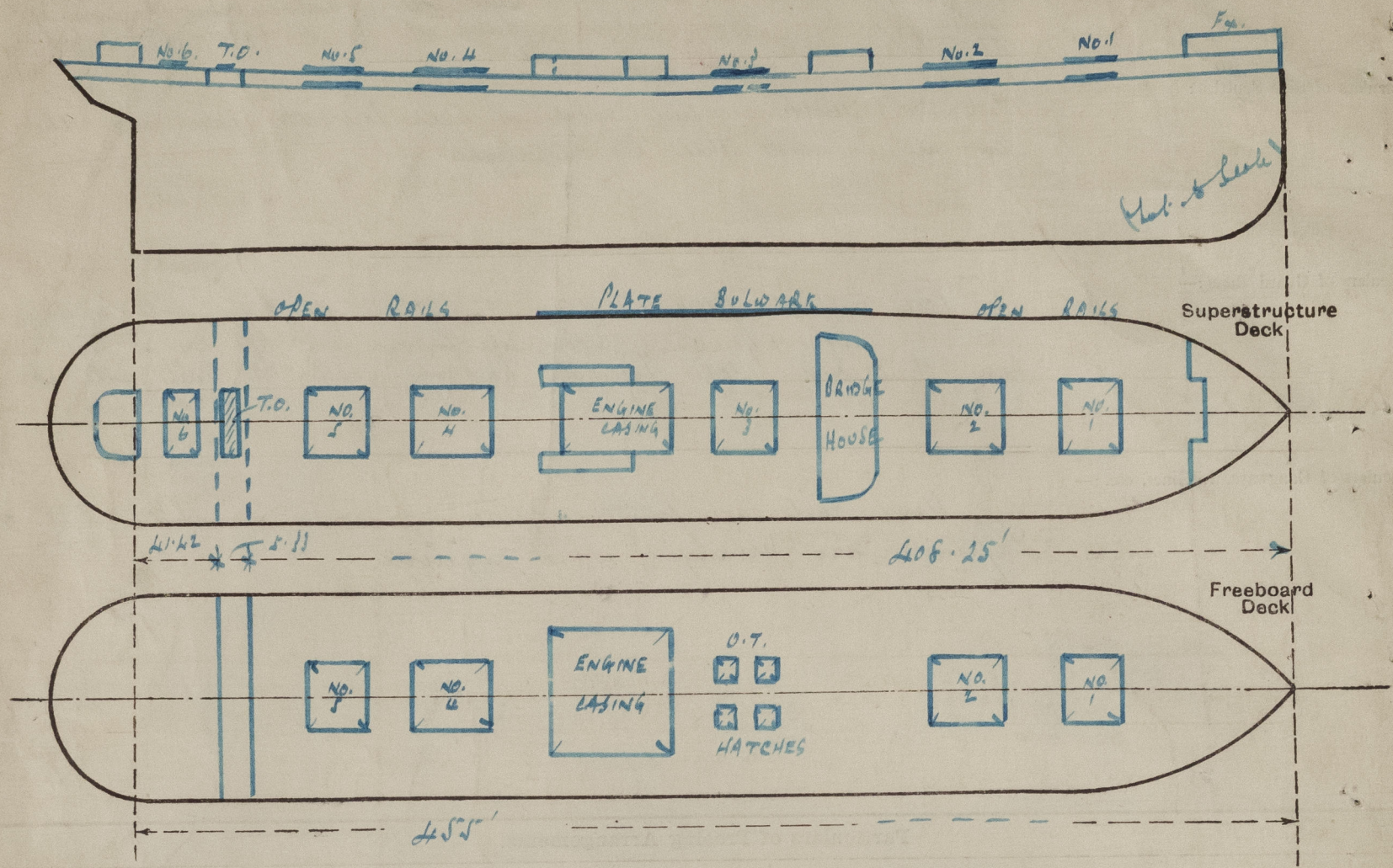
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	✓	1/4"	5 x 3 x 3/8 O.A.	42"	None	5' x 3'	18"	11"
Raised Quarter Deck Bulkhead	✓							
Bridge, After Bulkhead	✓	1/4"	5 x 3 x 3/8 O.A.	42"	None	5' x 3'	18"	11"
Bridge, Forward Bulkhead	✓							
Forecastle Bulkhead	✓							
Trunk, Aft	✓							
Trunk, Forward	✓							
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓							
Exposed Machinery Casings on Superstructure Decks	✓	5/16"	3 1/2 x 3 x 3/8 O.A.	32"	Plate top	68" x 24"	18"	8' - 3"
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓	Strongly constructed				None		
Deckhouses on Flush Deck Ships	✓							

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	2 1/2" Storm boards full height, in riveted channels.
Raised Quarter Deck Bulkhead	✓
Bridge, After Bulkhead	2 1/2" " " " " " " " " " " " "
Bridge, Forward Bulkhead	✓
Forecastle Bulkhead	✓
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓
Exposed Machinery Casings on Superstructure Decks	5/16" Steel hinged door, operable from both sides.
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓
Deckhouses on Flush Deck Ships	✓

Silvercypress

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shown on the following sketches:—



State any special features in the construction of the ship:—

Deadweight at full draft of	26'- $\frac{1}{2}$ "	—	4483 tons	} Tonnage from seawater capacity plan.
" " " " "	25'-2"	—	4000 "	
" " " " "	26'-6"	—	56.5 "	
" " " " "	25'-6"	—	56.05 "	

This vessel was surveyed while lying in the water at the Silver Line pier ft of 57th St. Bklyn. N.Y.

WTR

Builder's name and yard number *Harland and Wolff Ltd. (Belfast)*

Names of sister ships *"Silvercypress" "Silvercandal" "Silverleaf"*

Owners *Silver Line Ltd.*

Fee \$ *10.00* Received by me

Shaped & New York